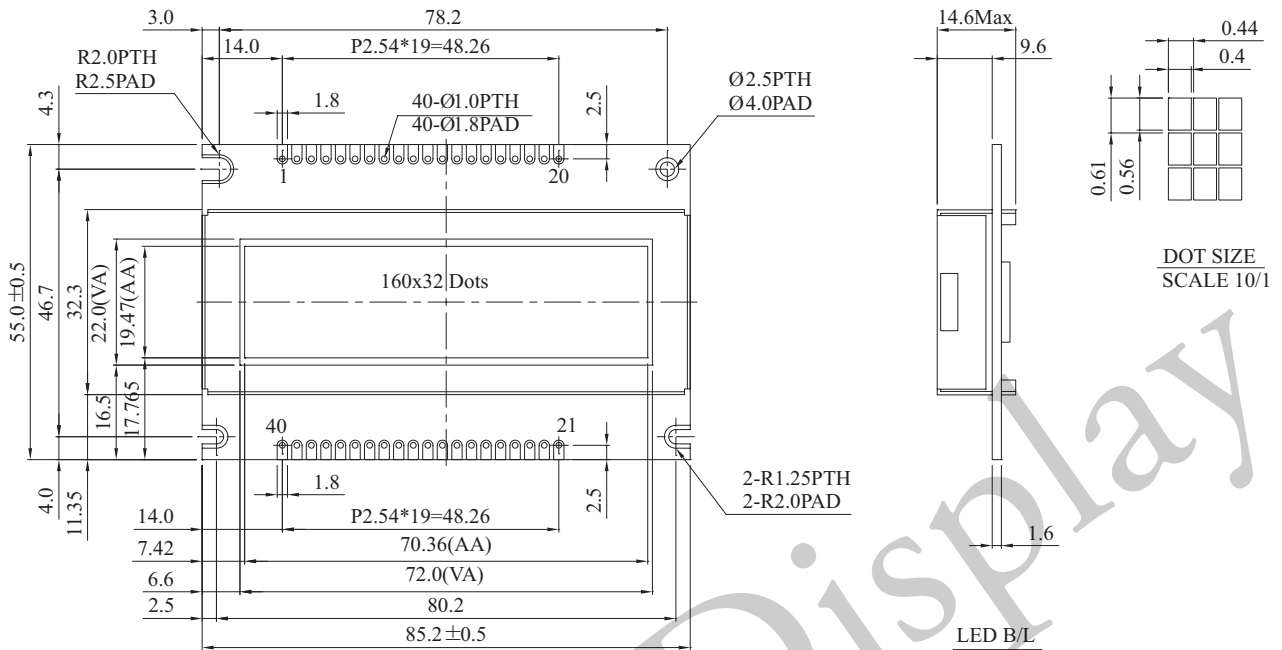


WG16032E Graphic 160x32 dots

Dimension drawing



Graphic type

Feature

1. 160x32 dots includes cursor
2. Built-in controller AT1520
3. + 5V power supply
4. 1/32 duty cycle

Mechanical Data

Item	Standard Value	Unit
Module dimension	85.2 x 55.0	mm
Viewing area	72.0 x 22.0	mm
Mounting hole	80.2 x 46.7	mm
Dot Size	0.40 x 0.56	mm
Dot Pitch	0.44 x 0.61	mm

Pin No.	Symbol	Description
1	Vss	Ground
2	Vdd	Power supply for logic
3	Vo	Operating voltage for LCD
4	A0	H : Data L : Instruction
5	CS1	Cs1=0 cs2=0 chip select signal for s1~s61 Cs1=0 cs2=1 chip select signal for s62~s141
6	CS2	Cs1=1 cs2=0 chip select signal for s142~s168
7	CL	Clock 2KHz
8	E	Chip Enable signal
9	R/W	H : Read ; L : Write
10	DB0	Data bus line
11	DB1	Data bus line
12	DB2	Data bus line
13	DB3	Data bus line
14	DB4	Data bus line
15	DB5	Data bus line
16	DB6	Data bus line
17	DB7	Data bus line
18	RST	H -> L: The LCM be reset
19	A	Power supply for LED B/L (+)
20	K	Power supply for LED B/L (-)
21-40	NC	NC

Absolute Maximum Rating

Item	Symbol	Standard Value			Unit
		min.	typ.	max.	
Power Supply	VDD-VSS	2.7	--	5.5	V
Input Voltage	VI	0	--	VDD	V

Note: VSS=0 Volt, VDD=5.0 Volt.

Electrical Characteristics

Item	Symbol	Condition	Standard Value			Unit
			min.	typ.	max.	
Input Voltage	VDD-VSS	-	4.5	5.0	5.5	V
Supply Current	IDD	-	1.8	2.0	2.2	mA
Recommended LC Driving Voltage for Normal Temp. Version module	VDD-VO	-20°C	-	-	-	V
		25°C	5.3	5.5	5.7	
		+70°C	-	-	-	
LED Forward Voltage	VF	25°C	4.9	5.0	5.1	V
LED Forward Current	IF	25°C	140	180	225	mA